

ABSTRACT OF THE DISCLOSURE

3/18/04
BMA

A water treatment system and method ^{reduces} ~~reduce~~ the pH level of a waste stream from an unacceptably high level with maximum efficiency and safety, and minimum costs and labor. The system includes a pH control system that detects a pH level of the waste stream. An acid discharge unit including a source of acid and an acid feeding mechanism is activated and deactivated by the pH control system according to the pH level of the waste stream. A housing contains the acid discharge unit and at least part of the pH control system. The acid feeding mechanism may feed dry acid directly to the waste stream or premix the dry acid with water to form a wet acidic solution that is fed into the waste stream. A mixing tank may be provided downstream of the housing to serve as an area for mixing acidic materials from the acid discharge unit with the waste stream prior to discharge from the plant.